

Cite as:

Custers, K., & McNallie, J. (in press). The Relationship between Television Sports Exposure and Rape Myth Acceptance: The Mediating Role of Sexism and Sexual Objectification of Women. *Violence Against Women*

The Relationship between Television Sports Exposure and Rape Myth Acceptance: The  
Mediating Role of Sexism and Sexual Objectification of Women

Custers<sup>a</sup>, K., & McNallie<sup>b</sup>, J.

<sup>a</sup>Leuven School for Mass Communication Research, KU Leuven, Belgium; <sup>b</sup>Brian Lamb  
School of Communication, Purdue University, USA

Correspondence concerning this article should be addressed to:  
Kathleen Custers, Leuven School for Mass Communication Research, KU Leuven – University  
of Leuven, Parkstraat 45 BOX 3603, 3000 Leuven, Belgium  
Email: Kathleen.Custers@soc.kuleuven.be

### Abstract

Rape affects a large proportion of women in the U.S., but is one of the most underreported crimes. It is believed that rape myth acceptance contributes to low reporting rates. We tested whether television sports exposure was indirectly related to higher acceptance of rape myth beliefs. An online survey involving 465 undergraduate students showed that viewing TV sports was positively related to hostile sexism, benevolent sexism, and sexual objectification of women. Through these variables, TV sports was indirectly and positively associated with rape myth acceptance. These results suggest that sports programming contributes to the perpetuation of rape myths in society.

*Keywords:* sexual violence, rape, rape myths, sexism, sexual objectification, television, sports

### The Relationship between Television Sports Exposure and Rape Myths Acceptance: The Mediating Role of Sexism and Sexual Objectification of Women

According to the National Violence Against Women Survey, about 1 in 5 US women have been the victim of an attempted or completed rape at some point in their lives (Tjaden & Thoennes, 2000). Of all crimes, rape is the most doubted and is often associated with stereotypical beliefs that blame the victim, that justify the perpetrator, and that minimize the violent act. These kinds of beliefs are also called rape myths and are described as: “attitudes and beliefs that are generally false but are widely and persistently held, and serve to deny and justify male sexual aggression against women” (Lonsway & Fitzgerald, 1994, p. 134). A typical example of a rape myth is the belief that women who claim rape are often promiscuous women who dress provocatively (see Kahlor & Eastin, 2011). Rape myths foster a climate in which violence against women is perpetuated. Acceptance of rape myths can increase rape proclivity in men (Bohner, Jarvis, Eyssel, & Siebler, 2005) and can decrease the reporting of sexual violent incidents in women (Frese, Moya, & Megías, 2004; Grubb & Turner, 2012).

Prior research has shown that sexist attitudes towards women and sexual objectification of women are associated with acceptance of rape myths. People with higher sexism scores and a higher tendency to sexually objectify women are more likely to justify sexual violence (Burt, 1980; Chapleau, Oswald, & Russell, 2007; Grubb & Turner, 2012; Sakallı-Uğurlu, Salman, & Turgut, 2010; Suarez & Gadalla, 2010). So far, research on the association between television viewing and rape myth acceptance is limited to mapping different associations between different types of television programs and rape myths beliefs. No attention has been paid to the underlying mechanisms that explain these associations.

Therefore, our study intends to investigate both the direct and indirect associations between television exposure and rape myth acceptance. Specifically, because research has

shown that media, in particular mainstream sports programming, are permeated with sexual stereotypes and sexually objectifying messages (e.g., Duncan & Messner, 2005; Messner, Dunbar, & Hunt, 2000), we propose that exposure to sports programming is related directly to acceptance of rape myths and indirectly through endorsement of sexism and sexual objectification of women. These predictions are based on cultivation theory, which posits that television is a societal purveyor of norms (Gerbner & Gross, 1976), and social cognitive theory, which posits that individuals learn by observing rewarding behavior modeled by others, including media characters (Bandura, 2002).

### **Ambivalent Sexism towards Women and Rape Myth Acceptance**

Feminist scholars have asserted that societal-level rape myth beliefs are deeply rooted in a patriarchal system where gender inequality prevails and sex role stereotypes are promoted (Burt, 1980; Edwards, Turchik, Dardis, Reynolds, & Gidycz, 2011; Rozee & Koss, 2001). These stereotypes reinforce male dominance over women by emphasizing the masculine, active, dominating male who takes the role of the protector and the passive, naïve woman who is expected to be pure and perfect (Burt, 1980; Glick et al., 2000; Grubb & Turner, 2012). On an individual level, prior studies showed that people who endorse sexist beliefs are more inclined to approve of victim-blaming perceptions (e.g., Abrams, Viki, Masser, & Bohner, 2003; Glick & Fiske, 1996). Glick and Fiske (1996) distinguished two types of sexist attitudes that differ in affective tone: hostile sexism and benevolent sexism. Hostile sexism refers to the typical denigration of women who disregard traditional gender roles. One example is “Women seek to gain power by getting control over men” (Glick & Fiske, 1996, p. 512). Benevolent sexism is described as “a set of interrelated attitudes toward women that are sexist in terms of viewing women stereotypically and in restricted roles, but that are subjectively positive in feeling tone” (Glick & Fiske, 1996, p. 491). An example is “Women as compared to men tend to have a more refined sense of culture and good taste” (Glick & Fiske, 1996, p.

512). People with high benevolent sexism scores tend to have more positive feelings towards women who respect traditional gender roles. People with high hostile sexism scores, on the other hand, tend to have more negative feelings towards women who support nontraditional roles (Glick et al., 2000). Because sexist norms determine which social standards and behavior are suitable for women, it seems reasonable to assume that adherence to ambivalent sexism is associated to higher acceptance of rape myths. Much research found support for this hypothesis (e.g., Burt, 1980; Chapleau et al., 2007; King & Roberts, 2011; Suarez & Gadalla, 2010; Yamawaki, 2007).

### **Sexual Objectification of Women and Rape Myth Acceptance**

Sexual objectification refers to the act of perceiving, treating, and evaluating a person as a sexual object (Frederickson & Roberts, 1997). Objectification theory posits that gender socialization encompasses many occurrences of sexual objectification experienced by women. Examples are the leering gaze and evaluations of women's bodies in daily interactions with other people and in media portrayals of women (Frederickson & Roberts, 1997; Moradi & Huang, 2008). According to sexual objectification theory, these experiences may socialize women to perceive themselves as objects and to evaluate themselves on the basis of appearance instead of their personality (Frederickson & Roberts, 1997).

Objectification affects not only people's self-perceptions but also their perceptions of others (Heflick & Goldenberg, 2009; Vaes, Paladino, & Puvia, 2011). Previous studies have shown that support for sexual objectification of women is associated with perceived victim blaming and perceived justification of sexual violence (Chapleau et al., 2007, Grubb & Turner, 2012; Laughan, Pina, Vasque, & Puvia, 2013; Sakallı-Uğurlu et al., 2010; Suarez & Gadalla, 2010). Loughnan and colleagues (2010) found that objectified people are perceived as less human and more naïve. This perception may result in reduced moral concern for the objectified (Laughman et al., 2013). They argued that if objectification affects people's

perceptions of moral treatment and if judgments of victims are based on moral concern, then it is possible that women who are objectified in sexual violence cases are perceived as less victimized than women who are not objectified.

### **Television and Rape Myth Acceptance**

The prevalence of rape myths on television may contribute to the persistent acceptance of these myths in society. Previous experimental studies already showed that sexually violent media content was associated with increased acceptance of interpersonal violence against women (Malamuth & Check, 1981; Weisz & Earls, 1995), heightened self-reported likelihood of raping (Malamuth & Check, 1983), increased acceptance of rape myths (Weisz & Earls, 1995), increased victim blaming (Dexter, Penrod, Linz, & Saunders, 1997), and reduced sympathy toward the victim (Weisz & Earls, 1995). Research has shown that perceptions are not only affected by sexually violent content: a recent meta-analysis found a moderate effect size of .72 for the relationship between the use of degrading images, such as pin-ups and commercials of sexually revealing women, and approval of rape supportive myths, too (Suarez & Gadalla, 2010). In addition, other studies found significant associations with exposure to different television genres. Soap opera viewing was positively related to acceptance of rape myths and the overestimation of false rape accusations (Kahlor & Eastin, 2011), whereas crime drama viewing was negatively related to rape myth acceptance (Kahlor & Eastin, 2011). Sports media exposure was indirectly related to intentions to intervene in sexual assault situations through rape myth acceptance (Hust et al., 2013).

### **Overview of Present Research**

Prior research on television viewing and rape myth acceptance focused on mapping associations between exposure to different television genres and support for rape myths. However, it should be noted that in the studies reported up until now no attention has been paid to the underlying mechanisms that explain the relationships between different types of

television programs and rape myth beliefs. The present research investigates whether the relationship between exposure to television sports and acceptance of rape myth exposure is mediated by adherence to ambivalent sexism and sexual objectification of women while controlling for gender, age, ethnicity, as well as direct and indirect unwanted sexual experiences, and overall television viewing.

Content analyses have shown there is a significant underreporting of females' sports and there is a significant inequality in how males and females are represented in sports programming (Bishop, 2003; Messner, Dunbar, & Hunt, 2000; Messner, Duncan, & Cooky, 2003; Messner & Cooky, 2010). In particular, sports programming is permeated with the televised sports manhood formula, a master discourse "where all men are Real Men, where women are present as sexy support objects for the men's violent, monumental 'wars' against each other" (Messner et al., 2000, p. 391). In other words, the televised sports manhood formula promotes and reinforces male dominance and female sexual objectification (Messner et al., 2000). For instance, scantily dressed women in wrestling shows or provocatively dressed cheerleaders who are prominently featured during basketball and football games. This way, televised sports programming creates a climate of disrespect for women (Duncan, Messner, Willms, & Wilson, 2005).

Cultivation theory posits that television is an important storyteller in society (Gerbner, Gross, Morgan, & Signorielli, 1986) and is considered a dominant purveyor of social norms associated with a culture of violence against women (Kahlor & Eastin, 2011). According to cultivation theory, repeated exposure to television messages may distort people's worldview on the long run in such a way that heavy viewers' worldview start to resemble the television world (Gerbner & Gross, 1976). Because messages of hegemonic masculinity and emphasized femininity are pervasive in sports programming, it is expected that heavy viewers of sports

programming are more likely to develop a worldview that supports sexism and sexual objectification. This, in turn, might lead to higher acceptance of rape myth beliefs.

Social cognitive theory also predicts that exposure to sports programming is positively related to rape myth acceptance. Bandura (2002) argues that individuals learn what behavior to engage in through direct experiences and indirect, or vicarious, experiences. Essentially, individuals engage in a process where they learn about the acceptability of behaviors through both their personal experiences and through observing attitudes and behavior of others, including through symbolic environments like media entertainment. The theory holds that individuals are more likely to model, or engage in, the behavior when the observed or experienced behavior is rewarded than when it is punished. Thus, according to social cognitive theory, individuals may adopt attitudes and behavior for which media characters are rewarded. Given that sports programming underreports women's sports and is accused of treating women in a sexist manner and portraying women as sexual objects, this may teach viewers that women are not capable of doing sports and are only good enough to perform as supportive props for men's athletic accomplishments.

Based on cultivation theory and social cognitive theory, we predicted that:

H 1a: Exposure to sports programming is positively related to hostile sexism.

H 1b: Exposure to sports programming is positively related to benevolent sexism.

H 2: Exposure to sports programming is positively related to sexual objectification of women.

H 3: Exposure to sports programming is positively related rape myth acceptance.

Because prior research showed that endorsement of sexism and sexually objectification of women are associated with acceptance of rape myths, we propose that:

H 4: Exposure to sports programming is indirectly related to rape myth acceptance through sexist attitudes and sexual objectification.



## Method

### Sample

Students participated in an online study hosted on the communication department's research participation system at a large, Midwestern university. To qualify for the survey, participants needed to be 1) heterosexual and 2) between the ages of 18 and 25. In total, 465 participants were included in analysis. The majority were female (60.6%,  $N = 282$ ; male: 39.4%,  $N = 183$ ), with an average age of 21 ( $SD = 1.49$ ). Also, most participants were white (71.2%,  $N = 331$ ) or Asian/Pacific Islander (18.7%,  $N = 87$ ). Overall, 58.1% were single ( $N = 270$ ), 28.3% were in a relationship ( $N = 178$ ), and 3.7% were living with their partner ( $N = 17$ ).

### Measures

Exploratory factor analyses (EFA), using SPSS version 22, and confirmatory factor analyses (CFA), using structural equation modeling software (AMOS<sup>TM</sup> 22.0), were run to test model fit for each scale. Using CFA, a process of iterative deletion based on poor component fit (nonsignificant paths and low loadings) and/or low  $R^2$  values in the CFA occurred until good model fit was obtained.

Three fit indices were used to assess model fit: 1) the model chi-Square and degrees of freedom, 2) the comparative fit index (CFI), and 3) the root mean square error of approximation (RMSEA). Models are said to have good fit when the chi-square value is nonsignificant, the RMSEA is below .08, and the CFI value is above .90 (Bollen, 1989; Browne & Cudeck, 1993). Because the Chi-square index is sensitive to sample size (Hu & Bentler, 1999), the ratio of Chi-square to degrees of freedom ( $\chi^2/df$ ) was also used to assess model fit. A good fit requires an index with a value around 2 or 3. Table 1 presents items and factor loadings based on the CFA.

The predictor variable in the model was television sports exposure.

**Television sports exposure.** Exposure to TV sports was measured by asking participants how often they watched “Sports (ESPN, football, basketball).” Answer choices ranged from *almost never (1)* to *almost every day (5)*. Overall, participants watched a moderate amount of sports programming ( $M = 2.75$ ,  $SD = 1.57$ ).

The mediating variables in the model were benevolent and hostile sexism, and sexual objectification.

**Hostile and benevolent sexism.** We used the Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996), which consists of 22-items measuring hostile (11 items) and benevolent sexism (11 items). Participants rated their agreement with the items using a 6-point Likert-type scale with anchors of *strongly disagree* and *strongly agree*. Scale items were found to load on two factors using EFA. In fitting the measurement model using CFA, benevolent sexism was reduced to five items and hostile sexism was reduced to four. Model fit for hostile sexism was acceptable,  $\chi^2(2, N = 465) = 7.975$ ,  $\chi^2/df = 7.975$ ,  $p < .05$ ; CFI = .989; RMSEA = .080. Items were summed to create an index ( $\alpha = .79$ ,  $M = 13.55$ ,  $SD = 3.73$ ). Likewise, the model fit for benevolent sexism was good,  $\chi^2(5, N = 465) = 10.921$ ,  $\chi^2/df = 2.184$ ,  $p > .05$ ; CFI = .986; RMSEA = .051. Items were summed to create an index ( $\alpha = .72$ ;  $M = 16.66$ ,  $SD = 4.16$ ). This measure has been validated in previous research (e.g., Abrams et al., 2003; Chapleau et al., 2007).

**Sexual objectification.** We used the “Women are sexual objects” subscale of the revised version of the Attitudes Toward Dating and Relationships Measure (Ward, 2002; Ward, Hansbrough, & Walker, 2005). Eight-items were measured using a 6-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. Scale items included “There’s nothing wrong with men whistling at shapely women” and “Using her body and looks is the best way for a woman to attract a man.” EFA revealed that the items loaded on a single factor and CFA indicated good model fit. This resulted in a seven-item measure with acceptable model fit,  $\chi^2$

(14,  $N = 465$ ) = 33.730,  $\chi^2/df = 2.409$ ,  $p < .05$ ; CFI = .977; RMSEA = .055 (see Table 1 for items and CFA results). Items were summed to create an index ( $\alpha = .81$ ;  $M = 21.43$ ,  $SD = 6.14$ ). This measure has been validated in previous research (e.g., Peter & Valkenburg, 2007).

The dependent variable in the model was rape myth acceptance.

**Rape myth acceptance.** We used the Subtle Rape Myth Acceptance (SRMA) scale (McMahon & Farmer, 2011), which is a revised version of the Illinois Rape Myth Acceptance Scale (IRMA) (Payne, Lonsway & Fitzgerald, 1999). The SRMA scale uses more update language for college students and has a specific focus on victim blaming and responsibility for rape. It includes 23 items with subscales that measure endorsement of four myths: 1) he didn't mean to, 2) it wasn't really rape, 3) she was asking for it, and 4) she lied about it being rape. Four factors following patterns established in existing research emerged in the EFA. Each subscale model was fit using CFA before testing whether these scales were indicative of a higher-order latent construct (i.e., subtle rape myth acceptance). Analysis supported the treatment of these variables as a higher order latent construct,  $\chi^2(100, N = 465) = 269.639$ ,  $\chi^2/df = 2.696$ ,  $p < .05$ ; CFI = .962; RMSEA = .060. Items were then summed to create an index ( $\alpha = .91$ ,  $M = 39.12$ ,  $SD = 10.82$ ). The scale has been validated in previous research (e.g., McMahon, 2010). Table 2 presents the items of the SRMA scale and the factor loadings based on the CFA.

The control variables in the model were age, sex, ethnicity, relationship status, direct and indirect unwanted sexual experience, and overall television viewing. Ethnicity was recoded into white (0) and non-white (1), and relationship status was recoded into single (0) and in a relationship (1).

**Overall television viewing.** To measure overall television exposure, participants were asked how many hours of television they watched on the average weekday (Monday-Friday), on the average Saturday, and on the average Sunday. They were prompted that "television

refers to television content, regardless of the platform it is viewed on (e.g., live TV, streaming, OnDemand, DVR, cell phone, etc.).” Also, due to the prevalence of binge-watching television content, or watching consecutive episodes of a television series in one sitting, participants were prompted to exclude binge watching from their estimates. A weekly average was computed by multiplying the average weekday estimate by five and adding that value to the average Saturday and Sunday estimates. Over the course of the week, participants watched 12.42 hours of television ( $SD = 8.91$ ), not including binge watching.

To capture their total overall viewing behavior, we also asked whether they had binge watched any content in the past month. If they indicated they had, they were asked to estimate 1) how many days in the past month they engaged in this behavior and 2) how many hours they binge watched content per day on average during the past month. The number of binge watching days was multiplied by the number of viewing hours per day. This number was divided by 4 to calculate an estimate of the number of hours binge watched per week ( $M = 4.31$ ,  $SD = 6.31$ ). The binge watching estimate was added to the general television exposure estimate to represent the overall television habits. Overall, participants watched 16.73 hours of television per week ( $SD = 12.35$ ).

**Direct and indirect unwanted sexual experience.** Items measuring direct and indirect unwanted sexual experiences asked whether the participant or someone they knew had 1) experienced an unwanted sexual act, 2) been sexually assaulted, or 3) raped. Items were then recoded such that saying yes to an experience of unwanted sexual activity was given a value of 1, selecting yes to the experience of sexual assault was given a value of 2, and choosing yes for the experience of rape was given a value of 3. Items measuring personal unwanted sexual experience were summed to create an index that ranged from 0 to 6 ( $M = .68$ ,  $SD = 1.50$ ). Likewise, the same process was used to create an index for indirect

experiences ( $M = 1.79$ ,  $SD = 2.45$ ). This measure has been validated in previous research (Kahlor & Eastin, 2011; Kahlor & Morrison, 2007).

[Table 1 about here]

[Table 2 about here]

## Results

Data were analyzed using AMOS 22 software for structural equation modeling (SEM). SEM is advantageous as it simultaneously tests the proposed associations among independent and dependent variables (Bollen, 1989).

Overall, the proposed model had adequate fit. Even though the Chi-square value was significant,  $\chi^2(681, N = 465) = 1.286.61$ ,  $p < .05$  the  $\chi^2/df$  (1.889), CFI (.92), and RMSEA (.044) indicated good fit.

Figure 1 portrays the tested model with 1) television sports viewing as the predictor variable, 2) hostile sexism, benevolent sexism, and sexual objectification as mediating variables, and 3) rape myth acceptance as the dependent variable. Age, sex, ethnicity, relationship status, direct and indirect unwanted sexual experience, and overall television viewing were included as control variables (see Table 3 for the control variable SEM results). Note that all path coefficients will be reported in their standardized formats.

### Direct Effects of TV Sports

The first set of hypotheses predicted that exposure to sports programming would be positively associated with hostile sexism (H 1a), benevolent sexism (H 1b), sexual objectification of women (H 2), and rape myth acceptance (H 3). Findings from the SEM analysis (see Figure 1) indicate that watching television sports is significantly and positively associated with both hostile ( $\beta = .22$ ,  $p < .001$ ) and benevolent sexism ( $\beta = .17$ ,  $p < .01$ ), which supports H 1a and H 1b. The more people watch television sports, the more they

upheld hostile and benevolent sexist beliefs. The model found that the direct association between exposure to television sports and sexual objectification of women was also significant ( $\beta = .22, p < .001$ ). Increased exposure to television sports is associated with increased sexual objectification of women. Therefore, H 2 was supported. The direct effect of television sports on rape myth acceptance was nonsignificant ( $\beta = .02, p > .05$ ), which was not in line with H 3.

### **Indirect Effects of TV Sports**

H 4 posited that exposure to sports programming would be indirectly related to rape myth acceptance through sexist attitudes and sexual objectification. Bootstrapping within AMOS revealed that the total indirect effect of television sports on rape myth acceptance was significant ( $\beta = .189, p < .001$ ). However, one issue with most SEM programs (e.g., AMOS) is that although it can test multiple paths, it only reports the sum of all mediation effects (Macho & Ledermann, 2011). Determining which indirect paths are significant, then, requires additional analysis.

To probe the indirect effects, a process called phantom modelling was used (see Macho & Ledermann, 2011, for complete details on the process). In this process, separate, unrelated, models are created for each indirect path to be probed. These models contain dummy variables for the variables of interest. The paths between these variables are constrained to the coefficient values of the relationship being tested. For example, if  $ab$  is the coefficient for the path between TV sports and hostile sexism and  $bc$  is the coefficient for the path between hostile sexism and rape myth acceptance, then the path between the new dummy TV sports and hostile sexism variables would be constrained to  $ab$  and the path between the new hostile sexism and rape myth acceptance variables would be constrained to  $bc$ . At this point, traditional bootstrapping methods would be able to calculate the confidence intervals

for the phantom model and indicate whether the specific indirect path between the TV sports and rape myth acceptance through hostile sexism was significant.

Using this method, the indirect paths between sports programming and rape myth acceptance were tested. First, hostile sexism was found to mediate the relationship between television sports viewing and rape myth acceptance ( $b = .031$ ,  $SE = .011$ ,  $p < .001$ ). Second, sexual objectification significantly mediates the relationship between exposure to television sports and acceptance of rape myths ( $b = .058$ ,  $SE = .015$ ,  $p < .001$ ). Finally, benevolent sexism significantly mediated the relationship ( $b = .011$ ,  $SE = .006$ ,  $p > .05$ ).

Overall, increased television sports viewership is associated with an increase in rape myth acceptance through all three indirect paths: 1) through hostile sexism, 2) through benevolent sexism, and 3) through sexual objectification. Because the direct effect of television sports on rape myth acceptance was nonsignificant, these results suggest that a full mediation is occurring. Therefore, these findings support H 4, which predicted the presence of indirect relationships.

[Figure 1 about here]

[Table 3 about here]

## Discussion

Sexual violence is omnipresent in modern society. Numerous factors contribute to the perpetuation of sexual violence in society. One of these factors is the acceptance of rape myths, which refers to a set of false cultural beliefs that justify this violent act by attributing the responsibility to the victim and excusing the perpetrator (Edwards et al., 2011; Lonsway & Fitzgerald, 1995). Feminists have stated that we live in a rape culture that fosters sexist attitudes towards women and the objectification of women through television and other media

(Burt, 1980). The aim of the current study was to examine whether exposure to sports programming is indirectly related to rape myth beliefs through sexist attitudes and sexual objectification of women.

The current study found that sports programming was positively related to hostile and benevolent sexist beliefs, and sexual objectification. These were, in turn, positively related to rape myth acceptance beliefs (Figure 1). Regarding the indirect paths, this study found that the relationship between exposure to sports programming and rape myth acceptance was fully mediated by hostile sexism, benevolent sexism, and sexual objectification.

Our findings support cultivation theory, which states that repeated exposure to specific television messages may affect viewers' worldview. Even though the early cultivation theorists focused on overall television viewing, based on the assumption that television offered uniform messages across television genres (Gerbner & Gross, 1976; Gerbner et al., 1986), more recently, cultivation scholars have started to investigate exposure to specific genres (see Bilandzic & Busselle, 2012). The current study extends existing research on television viewing and rape myth acceptance by investigating potential mediating processes. No other study has examined whether the relationship between television exposure and acceptance of rape myths is mediated by attitudes that objectify and devalue women. It is, for instance, possible that those studies that did not find a direct significant relationship between specific television genres and rape myth beliefs (e.g., Kahlor & Morrison, 2007) might have found a significant indirect relationship if important mediators, such as sexism and sexual objectification had been included.

The present study also supports social cognitive theory, which posits that individuals learn from observing others, including media models. Individuals are more inclined to imitate behavior of media characters if they perceive that the media character is rewarded for his/her belief or behavior. According to the social cognitive theory of gender development (Bussey &



Bandura, 1999), the media is an important sociocultural factor in the gender socialization process. In other words, the media helps explain what it means to behave in a typical masculine and feminine way. Given that female athletes are almost invisible or portrayed as sexual objects, these messages might teach viewers that women are not able or worthwhile to be shown as athletic or that it is acceptable to view women as objects. The current study has a number of limitations. First, the present study focused only on TV sports exposure. It is possible that reading TV sports magazines or playing sports-oriented video games might play a role, too. Second, TV sports exposure was assessed using a single item measure. By doing this we managed to keep the survey brief, which improved participation rates. Previous research (e.g., Hust et al., 2013) has used the same standardized measures for TV sports exposure. However, it is generally assumed that single-item indicators are more error prone than multiple-items indicators.

Lastly, although the mediation results may suggest a causal order, the present study used cross-sectional data and causal inferences cannot be made. It is possible that those individuals who score higher on sexism and sexually objectification are more likely to watch sports programming on television. Future research should focus on longitudinal designs, thus allowing us to draw causal conclusions. However, these results are an important first step to understanding the relationships between television sports and rape myth acceptance.

### *Conclusion*

The World Health organization refers to sexual violence as a severe health problem that threatens human rights. According to the Federal Bureau of Investigation a woman is raped every 6 minutes and the rate of rapes in 2011 was estimated at 52.7 per 100,000 females in the United States (Federal Bureau of Investigation, 2012). Given that sexual violence against women is highly prevalent in U.S. society it is crucial that research is devoted to examining its risk factors and its antecedents. The current research contributes to this aim

because it highlights that certain types of media use play an important role regarding the continuation of rape myth beliefs, which are considered important antecedents of rape proclivity and sexual aggression towards women. In addition, the present research highlights the importance of media literacy programs in elementary and high school to prevent these potential negative effects of TV sports exposure on young people. These messages might not only have negative effects on an individual's view of him- or herself, but they may affect the way people react to sexual violence in general. Additionally, women may internalize these ideas, which might contribute to their decision to not report rape.

#### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## References

- Abrams, D., Viki, G. T., Masser, B., & Bohner, G. (2003). Perceptions of stranger and acquaintance rape: The role of benevolent and hostile sexism in victim blame and rape proclivity. *Journal of personality and social psychology*, 84(1), 111-125. doi: 10.1037/0022-3514.84.1.111
- Bandura, A. (2002). Social cognitive theory of mass communication. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (2nd ed., pp. 121–154). Mahwah, NJ: Erlbaum.
- Bilandzic, H., & Buselle, R. (2012). A narrative perspective on genre-specific cultivation. In M. Morgan, J. Shanahan, & N. Signorielli (Eds.), *Living with television now: Advances in cultivation theory and research* (pp. 261-285). New York, NY: Peter Lang.
- Bishop, R. (2003). Missing in action: Feature coverage of women's sports in Sports Illustrated. *Journal of Sport & Social Issues*, 27(2), 184-194. doi: 10.1177/0193732502250718
- Bohner, G., Jarvis, C. I., Eyssel, F., & Siebler, F. (2005). The causal impact of rape myth acceptance on men's rape proclivity: Comparing sexually coercive and noncoercive men. *European Journal of Social Psychology*, 35(6), 819–828. doi: 10.1002/ejsp.284
- Bollen, K. (1989). *Structural equations with latent variables (SELV)*. New York, NY: Wiley.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing Structural Equation Models* (pp. 136-162). Newbury Park, CA: Sage
- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of personality and social psychology*, 38(2), 217-230. doi: 10.1037/0022-3514.38.2.217

- Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological review*, 106(4), 676-713. doi: 10.1037/0033-295X.106.4.676
- Chapleau, K. M., Oswald, D. L., & Russell, B. L. (2007). How ambivalent sexism toward women and men support rape myth acceptance. *Sex Roles*, 57(1-2), 131-136. doi: 10.1007/s11199-007-9196-2
- Dexter, H. R., Penrod, S., Linz, D., & Saunders, D. (1997). Attributing responsibility to female victims after exposure to sexually violent films. *Journal of Applied Social Psychology*, 27(24), 2149-2171. doi: 10.1111/j.1559-1816.1997.tb01645.x
- Duncan, M. C., Messner, M. A., Willms, N., & Wilson, W. (2005). Gender in televised sports: News and highlights shows, 1989-2004. Los Angeles: The Amateur Athletic Foundation of Los Angeles. Retrieved October, 20, 2015 from <http://www.aafla.org/9arr/ResearchReports/tv2004.pdf>
- Edwards, K. M., Turchik, J. A., Dardis, C. M., Reynolds, N., & Gidycz, C. A. (2011). Rape myths: History, individual and institutional-level presence, and implications for change. *Sex Roles*, 65(11-12), 761-773. doi: 10.1007/s11199-011-9943-2
- Federal Bureau of Investigation. (2012). Uniform crime report: Crime in the US, 2011. Retrieved on October 10, 2014, from <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/violent-crime/forcible-rape>
- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory. *Psychology of women quarterly*, 21(2), 173-206. doi: 10.1111/j.1471-6402.1997.tb00108.x
- Frese, B., Moya, M., & Megías, J. L. (2004). Social perception of rape: How rape myth acceptance modulates the influence of situational factors. *Journal of interpersonal violence*, 19(2), 143-161. doi: 10.1177/0886260503260245
- Gerbner, G., & Gross, L. (1976). Living with television: The violence profile. *Journal of*

- Communication*, 26(2), 173-199. doi: 10.1111/j.1460-2466.1976.tb01397.x
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1986). Living with television: the dynamics of the cultivation process. In J. Bryant & D. Zillmann (Eds.), *Perspectives on Media Effects* (pp. 17–40). Mahwah, NJ: Erlbaum.
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of personality and social psychology*, 70(3), 491-512. doi: 10.1037/0022-3514.70.3.491
- Glick, P., Fiske, S. T., Mladinic, A., Saiz, J. L., Abrams, D., Masser, B., & López, W. L. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of personality and social psychology*, 79(5), 763. Doi: 10.1037/0022-3514.79.5.763
- Grubb, A., & Turner, E. (2012). Attribution of blame in rape cases: A review of the impact of rape myth acceptance, gender role conformity and substance use on victim blaming. *Aggression and Violent Behavior*, 17(5), 443-452. doi: 10.1016/j.avb.2012.06.002
- Heflick, N., & Goldenberg, J. (2009). Objectifying Sarah Palin: Evidence that objectification causes women to be perceived as less competent and less fully human. *Journal of Experimental Social Psychology*, 45, 598–601. doi: 10.1016/j.jesp.2009.02.008
- Hust, S. J., Lei, M., Ren, C., Chang, H., McNab, A. L., Marett, E. G., & Willoughby, J. F. (2013). The effects of sports media exposure on college students' rape myth beliefs and intentions to intervene in a sexual assault. *Mass Communication and Society*, 16(6), 762-786. doi: 10.1080/15205436.2013.816737
- Kahlor, L., & Eastin, M. S. (2011). Television's role in the culture of violence toward women: A study of television viewing and the cultivation of rape myth acceptance in the United States. *Journal of Broadcasting & Electronic Media*, 55(2), 215-231. doi: 10.1080/08838151.2011.566085

- Kahlor, L., & Morrison, D. (2007). Television viewing and rape myth acceptance among college women. *Sex Roles*, 56(11-12), 729-739. doi: 10.1007/s11199-007-9232-2
- King, L. L., & Roberts, J. J. (2011). Traditional gender role and rape myth acceptance: From the countryside to the big city. *Women & Criminal Justice*, 21(1), 1-20. doi: 10.1080/08974454.2011.536045
- Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths in review. *Psychology of women quarterly*, 18(2), 133-164. doi: 10.1111/j.1471-6402.1994.tb00448.x
- Lonsway, K. A., & Fitzgerald, L. F. (1995). Attitudinal antecedents of rape myth acceptance: A theoretical and empirical reexamination. *Journal of Personality and Social Psychology*, 68(4), 704-711. doi: 10.1037/0022-3514.68.4.704
- Loughnan, S., Pina, A., Vasquez, E. A., & Puvia, E. (2013). Sexual objectification increases rape victim blame and decreases perceived suffering. *Psychology of Women Quarterly*, 37(4), 455-461. doi: 10.1177/0361684313485718
- Macho, S., & Ledermann, T. (2011). Estimating, testing, and comparing specific effects in structural equation models: The phantom model approach. *Psychological Methods*, 16(1), 34-43. doi: 10.1037/a0021763
- Malamuth, N. M., & Check, J. V. (1981). The effects of mass media exposure on acceptance of violence against women: A field experiment. *Journal of Research in Personality*, 15(4), 436-446. doi: 10.1016/0092-6566(81)90040-4
- Malamuth, N. M., & Check, J. V. (1983). Sexual arousal to rape depictions: Individual differences. *Journal of Abnormal Psychology*, 92(1), 55. doi: 10.1037/0021-843X.92.1.55
- McMahon, S. (2010). Rape myth beliefs and bystander attitudes among incoming college students. *Journal of American College Health*, 59(1), 3-11. doi: 10.1080/07448481.2010.483715

- McMahon, S., & Farmer, G. L. (2011). An updated measure for assessing subtle rape myths. *Social Work Research, 35*(2), 71-81. doi: 10.1093/swr/35.2.71
- Messner, M. A., Dunbar, M., & Hunt, D. (2000). The televised sports manhood formula. *Journal of Sport & Social Issues, 24*(4), 380-394. doi: 10.1177/0193723500244006
- Messner, M. A., Duncan, M. C., & Cooky, C. (2003). Silence, sports bras, and wrestling porn: Women in televised sports news and highlights shows. *Journal of Sport & Social Issues, 27*(1), 38-51. doi: 10.1177/0193732502239583
- Messner, M.A., & Cooky, C. (2010). *Gender in televised sports: News and highlights shows, 1989-2009*. University of Southern California, Los Angeles, CA: Center for Feminist Research.
- Moradi, B., & Huang, Y. P. (2008). Objectification theory and psychology of women: A decade of advances and future directions. *Psychology of Women Quarterly, 32*(4), 377-398. doi: 10.1111/j.1471-6402.2008.00452.x
- Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality, 33*(1), 27-68. doi: 10.1006/jrpe.1998.2238
- Peter, J., & Valkenburg, P. M. (2007). Adolescents' exposure to a sexualized media environment and their notions of women as sex objects. *Sex roles, 56*(5-6), 381-395. doi: 10.1007/s11199-006-9176-y
- Rozee, P. D., & Koss, M. P. (2001). Rape: A century of resistance. *Psychology of Women Quarterly, 25*(4), 295-311. doi: 10.1111/1471-6402.00030
- Sakallı-Uğurlu, N., Salman, S., & Turgut, S. (2010). Predictors of Turkish women's and men's attitudes toward sexual harassment: Ambivalent sexism, and ambivalence toward men. *Sex roles, 63*(11-12), 871-881. doi: 10.1007/s11199-010-9847-6

- Suarez, E., & Gadalla, T. M. (2010). Stop blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence, 25*(11), 2010-2035. doi: 10.1177/0886260509354503
- Tjaden, P., & Thoennes, N. (2000). *Full report of the prevalence, incidence, and consequences of violence against women: Findings from the national violence against women survey* (DOJ Publication No. NCJ183781). Washington, DC: U.S. Department of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/183781.pdf>
- Vaes, J., Paladino, P., & Puvia, E. (2011). Are sexualized women complete human beings? Why men and women dehumanize sexually objectified women. *European Journal of Social Psychology, 41*, 774-785; doi: 10.1002/ejsp.824
- Ward, L. M. (2002). Does television exposure affect emerging adults' attitudes and assumptions about sexual relationships? Correlational and experimental confirmation. *Journal of Youth and Adolescence, 31*, 1-15. doi: 10.1023/A:1014068031532
- Ward, L. M., Hansbrough, E., & Walker, E. (2005). Contributions of music video exposure to black adolescents' gender and sexual schemas. *Journal of Adolescent Research, 20*(2), 143-166. doi: 10.1177/0743558404271135
- Weisz, M. G., & Earls, C. M. (1995). The effects of exposure to filmed sexual violence on attitudes toward rape. *Journal of Interpersonal Violence, 10*(1), 71-84. doi: 10.1177/088626095010001005
- Yamawaki, N. (2007). Rape perception and the function of ambivalent sexism and gender-role traditionality. *Journal of Interpersonal Violence, 22*(4), 406-423. doi: 10.1177/0886260506297210



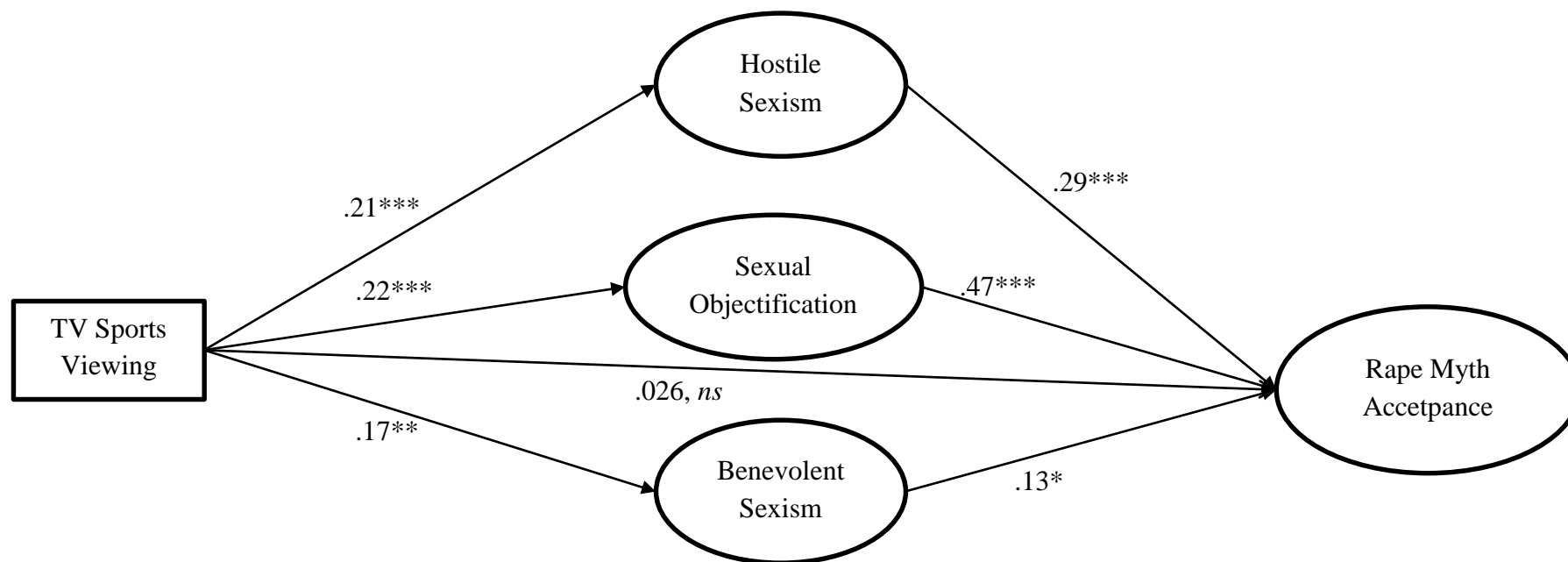


Figure 1. Structural equation model depicting the indirect relationship between TV sports programming and rape myth acceptance ( $N = 465$ )

Note. Ovals represent latent variables. Rectangles represent manifest variables. Coefficients are reported as standardized coefficients. Benevolent sexism, hostile sexism, and sexual objectification were allowed to covary. This model controlled for age, sex, ethnicity, relationship status, direct and indirect unwanted sexual experience, and overall television viewing.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 1

*Factor Loadings for Benevolent Sexism, Hostile Sexism, and Sexual Objectification based on CFA Results (n = 465)*

	<i>b (SE)</i>
<b>Benevolent Sexism</b>	
1. Many women have a quality of purity that few men possess.	.590***
2. A good woman should be set on a pedestal by her man.	.415***
3. Women, compared to men, tend to have a superior moral sensibility.	.650***
4. Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives.	.559***
5. Women, as compared to men, tend to have a more refined sense of culture and good taste.	.737***
<b>Hostile Sexism</b>	
1. Most women interpret innocent remarks or acts as being sexist.	.763***
2. Women are too easily offended.	.858***
3. Women seek to gain power by getting control over men.	.557***
4. Women exaggerate problems they have at work.	.589***

Continuation of Table 1

**Sexual Objectification**


---

1. An attractive woman should expect sexual advances and should learn how to handle them.	.540***
2. Women should be more concerned about their appearance than men.	.665***
3. Using her body and looks is the best way for a woman to attract a man.	.741***
4. Women should spend a lot of time trying to be pretty; no one wants to date a woman who has “let herself go.”	.753***
5. There’s nothing wrong with men whistling at shapely women.	.558***
6. There is nothing wrong with men being primarily interested in a woman’s body.	.526***
7. Being with an attractive woman gives a man prestige.	.558***

---

*Note.* Coefficients are reported as unstandardized coefficients (*SE*). \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Table 2

*Factor Loadings for Subtle Rape Myths Subscales based on CFA Results (n = 465)*

	$\beta$
<b>She Lied About It Being Rape</b>	<b>.74***</b>
1. A lot of times, girls who say they were raped agreed to have sex and then regret it.	.87***
2. Rape accusations are often used as a way of getting back at guys.	.88***
3. A lot of times, girls who say they were raped often led the guy on and then had regrets.	.87***
4. A lot of times, girls who claim they were raped just have emotional problems.	.80***
5. Girls who are caught cheating on their boyfriends sometimes claim that it was a rape.	.75***
<b>She Was Asking For It</b>	<b>.84***</b>
1. If a girl is raped while she is drunk, she is at least somewhat responsible for letting things get out of control.	.76***
2. When girls go to parties wearing slutty clothes, they are asking for trouble.	.78***
3. If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped.	.75***
4. If a girl acts like a slut, eventually she is going to get into trouble.	.72***

Continuation of Table 2

<b>It Wasn't Really Rape</b>	<b>.63***</b>
1. If a girl doesn't physically fight back, you can't really say it was rape.	.80***
2. A rape probably didn't happen if the girl has no bruises or marks.	.96***
3. If the accused "rapist" doesn't have a weapon, you really can't call it a rape.	.87***
<b>He Didn't Mean To</b>	<b>.57***</b>
1. When guys rape, it is usually because of their strong desire for sex.	.71***
2. Guys don't usually intend to force sex on a girl, but sometimes they get too sexually carried away.	.73***
3. Rape happens when a guy's sex drive gets out of control.	.82***
4. If a guy is drunk, he might rape someone unintentionally.	.64***
<i>Note.</i> Coefficients are reported as standardized coefficients. * $p < .05$ , ** $p < .01$ , *** $p < .001$	

Table 3

*Standardized Betas in Full Model for Control Variables*

	Sports TV Viewing	Hostile Sexism	Benevolent Sexism	Sexual Objectification	Rape Myth Acceptance
Age	.098*	-.090	-.070	-.035	-.06
Sex	-.40***	.028	.060	-.118*	-.07
Ethnicity	-.075	.036	.295***	.310***	.14***
Relationship Status	-.04	-.003	.071	-.010	.058
Overall TV Viewing	.07	.124*	-.031	.055	-.092*
Direct Unwanted Sexual Experience	-.015	.007	-.017	.018	.007
Indirect Unwanted Sexual Experience	-.08	.079	-.050	-.068	-.040

*Note.* Coefficients are reported as standardized coefficient. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$